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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/721,017	11/20/2003	Timothy Clarence Willging	SJO920030048US1	5665
46917 7590 06/27/2007 KONRAD RAYNES & VICTOR, LLP. ATTN: IBM37 315 SOUTH BEVERLY DRIVE, SUITE 210 BEVERLY HILLS, CA 90212			EXAMINER WALSH, JOHN B	
			ART UNIT 2151	PAPER NUMBER
			MAIL DATE 06/27/2007	DELIVERY MODE PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

## Office Action Summary

Application No.

10/721,017

Applicant(s)

WILLGING ET AL.

Examiner

John B. Walsh

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-30 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-30 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 20 November 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)            | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | Paper No(s)/Mail Date. ____                                       |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>11/20/03</u>  | 6) <input type="checkbox"/> Other: ____                           |

## **DETAILED ACTION**

### ***Claim Objections***

1. Claim 12 is objected to because of the following informalities: Claim 12, line 1 recites "system of claim 1". It appears it should be "system of claim 11". Appropriate correction is required.

### ***Claim Rejections - 35 USC § 112***

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claim 3 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 3 recites the limitation "the monitor program". There is insufficient antecedent basis for this limitation in the claim.

### ***Claim Rejections - 35 USC § 102***

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person should be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this

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subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

5. Claims 1-30 are rejected under 35 U.S.C. 102(e) as being anticipated by U.S. Publication No. 20030204597 A1 to Arakawa et al.

As concerns claims 1, 11, and 21, providing information on a network storage system, comprising: receiving information from at least one host system (figure 2; 300) identifying storage units (figure 2; 100) the host systems access through at least one identified storage system; probing the at least one storage system to determine storage units available through the storage system and an identifier (0048-0050) of the storage system; and processing the information received from the host systems on storage units the host systems access and the information probed from the at least one storage system on the storage units available through the storage system to determine an association (figure 5; 1011, 1012) of host systems to storage units for the at least one storage system.

As concerns claims 2, 12 and 22, wherein the information from the host systems is gathered by an agent program (340) executing in each host systems that queries the host system to determine the storage units the host system is capable of accessing and the at least one storage system through which the storage units are accessed, and wherein the agent program transmits the information on the accessible storage units and the at least one determined storage system to a monitor program (310,330).

As concerns claims 3, 13 and 23, wherein the monitor program further performs the operations of probing the at least one storage system and processing the information received from the agents executing in the host systems and the at least one storage system (0133).

As concerns claims 4, 14 and 24, wherein the agent program determines the accessible

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storage units and the at least one storage system by issuing at least one inquiry command that is a member of set of an industry standard storage interface (0089).

As concerns claims 5, 15 and 25, wherein the industry standard storage interface (0089) comprises the Small Computer System Interface (SCSI) and wherein the inquiry command comprises a SCSI inquiry command and wherein the storage units comprise Logical Unit Numbers (LUNs) (figures 7-8).

As concerns claims 6, 16 and 26, wherein the agent program determines the accessible storage units and the at least one storage system by: issuing a first inquiry command to determine a vendor and model number (0115) of the storage system including the accessible at least one storage unit; determining whether the determined vendor and model number are for a recognizable storage system (0115); and issuing a second inquiry command to determine the at least one accessible storage unit and the identifier of the storage system having the accessible storage unit if the determined vendor and model number are for one recognizable storage system (0115-0117).

As concerns claims 7, 17 and 27, further comprising: maintaining in a data repository: (i) host system information (0128) including the information received from the host systems identifying the host system and the storage units accessible from that host system and (ii) storage system information (0128) probed from the at least one storage system identifying the storage system and the storage units available at through that storage system.

As concerns claims 8, 18 and 28, further comprising: maintaining host/storage unit assignment information (0127;0117) indicating for one storage system the storage units available through that storage system and the host systems that access the available storage units, wherein

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the host/storage unit assignment information is generated by processing the host system and storage system information in the data repository.

As concerns claims 9, 19 and 29, wherein probing the at least one storage system comprises using an industry standard storage management interface to access information from the storage system (0089;0042).

As concerns claims 10, 20 and 30, wherein the information received from the host systems indicates an operating system (320) used by the host system, further comprising: generating information on the association of the host systems to storage units for at least one storage system (0128,0133); and generating information on the operating system used by each host system associated with the storage units (0133).

### ***Conclusion***

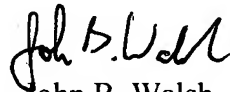
6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. See PTO-892.

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to John B. Walsh whose telephone number is 571-272-7063. The examiner can normally be reached on Monday-Thursday from 7:00-5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Zarni Maung can be reached on 571-272-3939. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from

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either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



John B. Walsh  
Primary Examiner  
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